

REMARKS

Claims 1-33 are pending in the present application. Claims 1, 5, 6, 8, 13, 15, 16, 17, 19 and 20 were amended. Reconsideration of the claims is respectfully requested.

I. Objection to Claims 16 and 17

The examiner has stated that claims 16 and 17 were objected to because of the following informalities:

Claim 16 should be dependent on claim 15 and claim 17 should be dependent on claim 16.
(Office Action dated 07/12/2004, page 2)

In response, the claims have been amended to overcome this objection.

II. 35 U.S.C. § 103, Obviousness, claims 1, 2, 6, 22, 23, 31, 8, 9, 13, 24, 32, 15, 16, 20, 25, 26, and 33

The examiner has rejected claims 1, 2, 6, 22, 23, 31, 8, 9, 13, 24, 32, 15, 16, 20, 25, 26, and 33 under 35 U.S.C. § 103 as being unpatentable over Barber et al. ("*Barber*", US 5,751,286) in view of Fodor et al. ("*Fodor*", US 6,309,822). This rejection is respectfully traversed.

As to claims 1, 2, 6, 22, 23, 31, 8, 9, 13, 24, 32, 15, 16, 20, 25, 26, and 33, the examiner states:

As per independent claim 1, Barber teaches a method for presenting graphical data to a user, comprising the steps of:

analyzing a set of graphical data to determine a set of critical factors present in the graphical data (col. 6, line 30 – col. 7, line 13);
ranking the determined critical factors according to respective priorities set for each of the critical factors (col. 14, lines 44-67); and
Barber teaches generating a set of graphical data, ordered according to the priority of the respective critical factor (col. 14, lines 65-67 and col. 9, lines 57-61). However, Barber does not disclose a textual description of the set of graphical data. Fodor discloses image analysis software converts the scanned array images into text files (col. 10, lines 27-28). It would have been obvious to an artisan at the time of the invention to use the teaching from Fodor of providing a textual description of the set of graphical data in Barber's system since it would enable Barber's system to be used by sight impaired people.

(Office Action dated July 12, 2004, pages 2-3.)

The examiner bears the burden of establishing a *prima facie* case of obviousness based on the prior art when rejecting claims under 35 U.S.C. § 103. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992).

Amended independent claim 1, which is representative of amended independent claims 8 and 15, recites:

1. A method for presenting graphical data to a user, comprising the steps of:
analyzing a set of graphical data to determine a set of critical factors present in the graphical data to form determined critical factors;
ranking the determined critical factors according to respective priorities set for each of the critical factors; and
generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors.

In comparing *Barber* to the claimed invention, the claim limitations of the presently claimed invention may not be ignored in an obviousness determination. More specifically, the present invention in claim 1 recites: generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors. Such a feature is not taught or suggested by *Barber*. Therefore, claim 1 is not obvious in view of *Barber* because the features believed to be disclosed by this cited reference are not present.

Additionally, when combined, the *Barber* and *Fodor* references still do not teach all of the features of claim 1. Neither *Barber* nor *Fodor* teaches generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors. The examiner points to the following two passages in *Barber* as teaching generating a set of graphical data, ordered according to the priorities of each of the respective critical factors:

- (i) For each image in the collection, compute its similarity score:
 - (a) For each area specified in the query, compute a positional feature score that compares the area's similarity to the image areas computed in Step 3. This score combine both features along with positional similarity so that areas with similar features get higher scores, dissimilar features get lower scores, and areas positionally close get higher scores, and areas positionally far get lower scores. The result is a score, for each query area, of its positional feature similarity within this image. The highest scores will be obtained by areas both positionally

close and with similar features. Indexing techniques could be used to increase the performance of searching for the "best" matches.

- (b) Combine the scores for all query areas to give a global score for the image.
- (c) Rank the images by their global scores and return, as the results of the query, the images with the best scores.

(*Barber*, col. 14, lines 44-67)

- (ii) The order of the returned images is preferably sorted from best to worst match, and the number of images return can be controlled by manipulation of the thumbnail attributes of weight and distance described above.

(*Barber*, col. 9, lines 57-61)

In the first cited passage, *Barber* teaches getting a global score for an image and then ranking the images examined by this total score (col. 14, lines 65-67). In the second cited passage, *Barber* teaches that returned images are sorted from best match to worst match (col. 9, lines 57-61). The second cited passage also teaches that the number of images returned for a query can be affected by altering the thumbnail attributes of weight and distance (col. 9, lines 57-61). While these passages do teach ordering graphical data, neither of these passages teaches generating a set of graphical data, ordered according to the priorities of each of the respective critical factor. The sorting of images from best match to worst match is achieved by ranking the images' global scores. A global score is not a set of graphical data, ordered according to the priorities of each of the respective critical factors, as recited in claim 1; but rather, it is the sum of the relational scores for each item of data in a set of graphical data compared to a corresponding item of data in base set of graphical data. Neither the graphical data nor the relational scores are ordered according to the priorities of each of the respective critical factors.

Barber explains how this global score and thus how the image rankings are determined:

- For each image in the collection, compute its similarity score:
- (d) For each area specified in the query, compute a positional feature score that compares the area's similarity to the image areas computed in Step 3. This score combine both features

along with positional similarity so that areas with similar features get higher scores, dissimilar features get lower scores, and areas positionally close get higher scores, and areas positionally far get lower scores. The result is a score, for each query area, of its positional feature similarity within this image. The highest scores will be obtained by areas both positionally close and with similar features. Indexing techniques could be used to increase the performance of searching for the "best" matches.

- (e) Combine the scores for all query areas to give a global score for the image.
- (f) Rank the images by their global scores and return, as the results of the query, the images with the best scores.

(*Barber*, col. 14, lines 44-67)

The results arrived at under *Barber* are ordered according to a total score, which is based on several factors, but these factors are not prioritized. That is, as taught by *Barber*, no single factor is more important to have than any other, as the total score that is obtained is all that matters.

These results are not presented in terms of, or ordered by, the priorities of each of the critical factors, as the factors are not prioritized. Rather, they are presented as single sums without reference to the factors that determined them. On the other hand, the present invention recites generating a set of graphical data, ordered according to the priorities of each of the respective critical factors. Therefore, the factors are ranked using priorities. Also, the determination of a best match would be based the score of the individual factors when compared to each other and not the total score of all the factors combined, as taught by *Barber*. Therefore, *Barber* does not teach generating a set of graphical data, ordered according to the priorities of each of the respective critical factors. Thus, it follows that *Barber* does not teach generating a textual description of a set of graphical data, ordered according to the priorities of each of the respective critical factors.

Fodor does not cure the deficiencies of *Barber*. *Fodor* does not teach the features missing from *Barber*, including generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective

critical factors, nor does the examiner point to any portion of *Fodor* that teaches these features. The examiner points to the following passage of *Fodor*:

Image analysis software converts the scanned array images into text files in which observed intensities at specific locations are associated with particular probe sequences.
(*Fodor*, col. 10, lines 27-30)

This passage of *Fodor* teaches using imaging software to generate a textual description for graphical data. That is, in the specific instance, the image information of the value of the intensity observed at a particular location is reported in connection to the probe sequence which made the observation. This is not teaching generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors. No critical factors are present or used in *Fodor*. As there are no critical factors, it follows that the textual description of the set of graphical data cannot be ordered according to the priorities of each of the respective critical factors. Therefore, *Fodor* does not teach generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors. Also, no teaching, suggestion or incentive is present to modify *Fodor* to include the feature.

Thus, even if one were to combine the teachings of *Barber* and *Fodor*, the resulting combination would not teach generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors. Rather, the resulting combination would teach generating a textual description of the set of global scores, ordered from highest to lowest. Therefore, the combination of *Barber* and *Fodor* still would not reach the presently claimed invention.

The mere fact that a prior art reference can be readily modified does not make the modification obvious unless the prior art suggested the desirability of the modification. *In re Laskowski*, 871 F.2d 115, 10 U.S.P.Q.2d 1397 (Fed. Cir. 1989) and also see *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992) and *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1993). The examiner may not merely state that the modification would have been obvious to one of ordinary skill in the art without pointing out in the prior art a suggestion of the desirability of the proposed modification.

The present invention in amended claim 1 includes the feature of generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors. In contrast, *Barber* teaches getting a global score for an image and then ranking the images examined by this total score, but does not teach or suggest generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors.

In this case the examiner has provided a suggestion, but it is not based on the prior art. Clearly, this suggestion is not from the two cited references, and the examiner has provided no teaching, suggestion, or incentive from other references. The examiner cannot combine references on his own accord.

The proposed modification of *Barber* would not be made when *Barber* is considered as a whole. "It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art." *In re Hedges*, 228 U.S.P.Q. 685, 687 (Fed. Cir. 1986). In considering the references as a whole, one of ordinary skill in the art would look at the problems recognized by the cited references. *Barber* is solving the problem of "retrieving images from an online image database." (*Barber*, col. 2, lines 37-38) Specifically, *Barber* teaches giving the user the ability to "automatically retrieve an image from a large collection of images by approximately specifying the colors or other image characteristics of areas that occur in the image and the approximate positions at which they occur." (*Barber*, col. 2, lines 47-52) In contrast, *Fodor* addresses the problem of "simultaneously monitoring the expression (e.g. detecting and or quantifying the expression) of a multiplicity of genes." (*Fodor*, col. 2, lines 53-55) These problems are quite different. The problems do not suggest each other and are in such unrelated fields that a person of ordinary skill in the art would not look to these disparate references.

Additionally, the solutions provided by the two references are totally different. *Barber* states:

The invention is embodied in a query facility which builds a visual query by image content. An imager query area is displayed on a display surface. One or more image characteristic selection areas are displayed which afford a user a means to select image characteristics. An image query is constructed by moving

selected image characteristic representations from a selection area to the image query area. A query engine generates an image query in response to the types and positions of selected image characteristic representations in the image query area. Query responses include database images with features that correspond to the selected image characteristic representations in the image query area.
(*Barber*, col. 2, line 64 – col. 3, line 8)

As can be seen, *Barber* teaches creating a visual image query engine using icons to select image characteristics. A query engine generates an image query in response to the types and position of the selected icons in the query area. On the other hand, *Fodor* teaches a method whereby "the levels of transcription, RNA processing and degradation for virtually any number of genes may be determined simultaneously." (*Fodor*, col. 2, lines 55-58) These two solutions have no relation to each other. The solutions are directed towards totally different inventions and they do not have any bearing on each other. As such, one of ordinary skill in the art would not consider looking to these references.

Moreover, the examiner may not use the claimed invention as an "instruction manual" or "template" to piece together the teachings of the prior art so that the invention is rendered obvious. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). Such reliance is an impermissible use of hindsight with the benefit of applicant's disclosure. *Id.* Therefore, absent some teaching, suggestion, or incentive in the prior art, *Barber* and *Fodor* cannot be properly combined to form the claimed invention. As a result, absent any teaching, suggestion, or incentive from the prior art to make the proposed combination, the presently claimed invention can be reached only through an impermissible use of hindsight with the benefit of applicant's disclosure a model for the needed changes.

One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992)

Thus claims 1, 8 and 15 are patentable over the cited references because the combination of the *Barber* reference with *Fodor* does not teach nor suggest the presently claimed invention.

Claims 2, 3, 6, 22, 23, 28 and 31 are dependent claims depending on claim 1. Claims 9, 10, 13, 24 and 32 are dependent claims depending on claim 8. Claims 16, 17,

20, 25, 26 and 33 are dependent claims depending on claim 15. As Applicant has already demonstrated that independent claims 1, 8 and 15 are patentable over the *Barber* and *Fodor* references, Applicant submits that dependent claims 2, 3, 6, 9, 10, 13, 16, 17, 20, 22-26 and 31-33 are patentable over the *Barber* and *Fodor* references at least by virtue of depending from an allowable claim. Additionally, claims 2, 3, 6, 9, 10, 13, 16, 17, 20, 22-26 and 31-33 claim other additional combinations of features not suggested by the reference. For instance claim 2 recites "wherein the set of critical factors and the textual description are selected according to a selected mode" and claim 6 recites "wherein said priorities of each of the respective critical factors is determined in accordance with said selected mode." Neither feature is taught by the references.

Therefore, the rejection of claims 1-3, 6, 8-10, 13, 15-17, 20, 22-26 and 31-33 under 35 U.S.C. § 103(a) has been overcome.

III. 35 U.S.C. § 103, Obviousness, claims 4, 5, 11, 12, 18, and 19

The examiner has rejected claims 4, 5, 11, 12, 18, and 19 under 35 U.S.C. 103(a) as being unpatentable over *Barber* in view of *Fodor* and further in view of *Hasser* et al. ("*Hasser*", US 5,736,978). This rejection is respectfully traversed.

The *Barber* reference still does not teach or suggest all the claim limitations in claims 4, 5, 11, 12, 18, and 19, as argued in the response to the rejection of claim 1 above.

Furthermore, neither *Fodor* nor *Hasser* cures the deficiencies of *Barber*. Neither *Fodor* nor *Hasser* teaches the features missing from *Barber*, including generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors, nor does the examiner cite to any portion of *Fodor* or *Hasser* that teaches these features.

Thus claims 4, 5, 11, 12, 18, and 19 are patentable over the cited references because the combination of the *Barber* with *Fodor* and *Hasser* would not teach the presently claimed invention. The features relied upon as taught in the *Barber* reference are not taught or suggested by that reference, as explained above. Neither *Fodor* nor *Hasser* cure the deficiencies of *Barber*. As a result, a combination of these references would not teach the claimed invention in claims 4, 5, 11, 12, 18, and 19.

In view of the above, Applicants submit that dependent claims 4, 5, 11, 12, 18, and 19 are not taught or suggested by *Barber* or *Fodor* or *Hasser*. Claims 4, 5, 11, 12, 18, and 19 are dependent claims depending on claims 1, 8 and 15. Applicants have already demonstrated that independent claims 1, 8 and 15 to be in condition for allowance. Applicants respectfully submit that claims 4, 5, 11, 12, 18, and 19 are also allowable at least by virtue of depending from an allowable claim.

Therefore, the rejection of claims 4, 5, 11, 12, 18, and 19 under 35 U.S.C. § 103 have been overcome.

IV. 35 U.S.C. § 103, Obviousness, claims 7, 14 and 21

Claims 7, 14, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Barber* in view of *Fodor* and further in view of *Discolo* et al. ("*Discolo*", US 6,370,566). This rejection is respectfully traversed.

The *Barber* reference still does not teach or suggest all the claim limitations in claims 7, 14 and 21, as argued in the response to the rejection of claim 1 above.

Furthermore, neither *Fodor* nor *Discolo* cures the deficiencies of *Barber*. Neither *Fodor* nor *Discolo* teaches the features missing from *Barber*, including generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors, nor does the examiner cite to any portion of *Fodor* or *Discolo* that teaches these features.

Furthermore, *Discolo* does not teach, suggest, or give any incentive to make the needed changes to reach the presently claimed invention. Absent the examiner pointing out some teaching or incentive to implement *Discolo* and generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors, one of ordinary skill in the art would not be led to modify *Discolo* to reach the present invention when the reference is examined as a whole. Absent some teaching, suggestion, or incentive to modify *Discolo* in this manner, the presently claimed invention can be reached only through an improper use of hindsight using the applicants' disclosure as a template to make the necessary changes to reach the claimed invention.

Thus claims 7, 14 and 21 are patentable over the cited references because the combination of the *Barber* with *Fodor* and *Discolo* would not teach the presently claimed invention. The features relied upon as taught in the *Barber* reference are not taught or suggested by that reference, as explained above. Neither *Fodor* nor *Discolo* cure the deficiencies of *Barber*. As a result, a combination of these references would not teach the claimed invention in claims 7, 14 and 21.

In view of the above, Applicants submit that dependent claims 7, 14 and 21 are not taught or suggested by *Barber* or *Fodor* or *Discolo*. Claims 7, 14 and 21 are dependent claims depending on claims 1, 8 and 15. Applicants have already demonstrated that independent claims 1, 8 and 15 to be in condition for allowance. Applicants respectfully submit that claims 7, 14 and 21 are also allowable at least by virtue of depending from an allowable claim.

Therefore, the rejection of claims 7, 14, and 21 under U.S.C. § 103 have been overcome.

V. **35 U.S.C. § 103, Obviousness, claims 27-30**

Claims 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Barber* in view of *Fodor* and further in view of applicant's admitted prior art. This rejection is respectfully traversed.

The *Barber* reference still does not teach or suggest all the claim limitations in claims 27-30, as argued in the response to the rejection of claim 1 above.

Claim 28 is a dependent claim depending on claim 1. Claims 27 and 29 are dependent claims depending on claim 8. Claim 30 is a dependent claim depending on claim 15. Applicants have already demonstrated that independent claims 1, 8 and 15 to be in condition for allowance. Applicants respectfully submit that claims 27-30 are also allowable at least by virtue of depending from an allowable claim.

Therefore, the rejection of claims 27-30 under U.S.C. § 103 have been overcome.

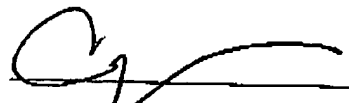
VI. Conclusion

It is respectfully urged that the subject application is patentable over the cited references and is now in condition for allowance.

The examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,



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